

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 9-17, 24-25, 27-35, 53** are rejected under 35 U.S.C. 102(b) as being anticipated by Cohen et al. (US 6,377,983 B1), hereinafter “Cohen”.

As per claim 1, Cohen teaches an automated method comprising:

- “detecting submission of a first search query from a client to at least one search engine” at Col. 7 lines 35-50 and Col. 11 lines 3-15;
- “storing a search trail corresponding to the first search query” at Col. 7 lines 35-50;
- “providing a data storage system on a server storing a plurality of search trails resulting from search queries from a same user and other users” at Col. 7 lines 50-65;
- ” receiving a second search query from a client to a search engine” at Col. 8 lines 20-22;
- “searching the data storage system to match the received second search query to the first search query corresponding to at least one search trail to identify at least one related search trail stored on the data storage system” at Col. 8 lines 15-50;

- “presenting search results to the client based upon the at least one related search trail” at Col. 8 lines 15-50.

As per claim 9, Cohen teaches the method of claim 1, wherein “the step of detecting submission of a search query to at least one search engine is optionally selectable at the client” at Col. 11 lines 3-15.

As per claim 10, Cohen teaches the method of claim 1, wherein “the step of storing a search trail includes: recording the URL of the consecutively accessed sites” at Col. 7 lines 30-50.

As per claim 11, Cohen teaches the method of claim 10, wherein “the step of storing a search trail further includes recording one or more of a user identifier, the network address of the client and search term or terms entered by the user at the client” at Col. 7 line 60 to Col. 8 line 14.

As per claim 12, Cohen teaches the method of claim 10, wherein “the step of storing a search trail further includes: transmitting the one or more parameters of at least one trail step identified at the client to the data storage system of the server for recordal” at Col. 7 lines 50-55.

As per claim 13, Cohen teaches the method of claim 12, further including:
“initially recording the one or more parameter in a RAM table at the trail recorder server”
at Col. 7 line 60 to Col. 8 line 14 .

As per claim 14, Cohen teaches the method of claim 13, and further comprising:
“periodically saving RAM table data to disk-based tables at the trail recorder server” at
Col. 7 line 60 to Col. 8 line 14.

As per claim 15, Cohen teaches the method of claim 14, wherein “a first disk-based table stores data characterizing each search trail” at Col. 7 line 60 to Col. 8 line 14 .

As per claim 16, Cohen teaches the method of claim 14, wherein “a second disk-based table stores data characterizing the consecutively accessed pages in each search trail” at Col. 7 lines 30-50.

As per claim 17, Cohen teaches the method of claim 1, wherein “the number of consecutively accessed sites is limited to a predetermined maximum” at Fig. 5.

As per claim 24, Cohen teaches the method of claim 1, wherein “the step of searching the data storage system to match the received search query to a search query corresponding to at least one search trail includes: conducting a full text search

on the data storage system for at least part of a search query corresponding to at least one of the plurality of search trails" at Col. 8 lines 15-30.

As per claim 25, Cohen teaches the method of claim 24, wherein "step of searching the data storage system to match the received search query to a search query corresponding to at least one search trail includes: limiting the search trail to search trails resulting search queries from a same user as the received search query" at Col. 8 lines 15-30.

As per claim 27, Cohen teaches the method of claim 1, wherein "the step of presenting search results to the client based upon the at least one related search trail includes presenting the related search trails at the client" at Col. 8 lines 15-50.

As per claim 28, Cohen teaches the method of claim 1, wherein "the step of presenting search results to the client based upon the at least one related search trail includes: ordering the related search results by one or more ranking criteria" at Col. 4 lines 1-15.

As per claim 29, Cohen teaches the method of claim 28, wherein "the ranking criteria include any one or more of data, inverse document frequency match, target search engine, user identifier, or trail weight indicative of the cumulative frequency of user visits to steps in a related search trail" at Col. 4 lines 1-15.

As per claim 30, Cohen teaches the method of claim 1, wherein the communication network is the Internet, an intranet, an extranet, or other network running client/server application" at Col. 6 lines 35-45.

As per claim 31, Cohen teaches the method of claim 1, wherein "the search engine is maintained on the client" at Col. 5 lines 50-55.

As per claim 32, Cohen teaches a system for presenting search results to a client based upon a search query comprising:

- "a search trail recorder for recording a search trail including at least one trail step corresponding to two consecutively accessed pages that are accessed by the client via a hyperlink between the pages, each search trail corresponding to a respective search query" at Col. 7 lines 30-65;
- "a data storage system for storing a plurality of search trails, the search trails resulting from search queries from a same user and other users" at Col. 7 lines 30-65 ;
- "a server system programmed to provide a trail searcher for searching the data storage system to match a received search query to a search query corresponding to at least one search trail to identify at least one related search trail stored on the server" at Col. 8 lines 15-50.

As per claim 33, Cohen teaches the system of claim 33 discussed above.

Cohen also teaches: "a search query detector for detecting submission of a search query from the client to a search engine; and a search trail recorder for recording a search trail of one or more parameters of sites accessed consecutively following return of search query results to the client" at Col. 5 lines 45-65.

As per claim 34, Cohen teaches the system of claim 33, wherein the client computer is further programmed to provide an adapter manager for maintaining an adapter table of known search command formats for a plurality of search engines for identifying one or more search query parameters are entered by a user" at Col. 5 lines 45-65.

As per claim 35, Cohen teaches the system of claim 33, wherein "the search query detector is a toolbar, browser addon, or extension, deskbar, agent, proxy or like client side application" at Col. 5 lines 45-65.

As per claim 53, Cohen teaches the method of claim 1, wherein the step of storing a search trail includes: "increasing a trail weight in response to the number of time a step on the trail is visited by a user" at Col. 11 lines 15-45.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 5-8, 41-42, 45-52** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Cohen**, and in view of Kraft (US 7,725,526 B1), hereinafter "**Kraft**"

As per claim 41, Cohen teaches the method of claim 1 discussed above. Cohen does not explicitly teach: "the step of detecting submission of the search query includes: determining if part of the form object matches a known search command format of any of a plurality search engines, and maintaining an adapter table of known search command formats for a plurality of search engines for identifying one or more search query parameters are entered by a user" as claimed. However, Kraft teaches a method for sharing query history (Col. 8 lines 1-40), including a query analyzer which receives all request URL strings and detects whether the particular URL represent a search query (Col. 6 lines 6-30). Kraft teaches the step of "determining if part of the form object matches a known search command format of any of a plurality search engines, and maintaining an adapter table of known search command formats for a plurality of search engines for identifying one or more search query parameters are entered by a user" at

Col. 9 lines 1-22 and Col. 10 lines 5-35. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Kraft with Cohen's teaching in order to pride an accurate method for identifying and detecting a search query so that proper action such recording search trail can be initiated.

As per claim 42, Cohen and Kraft teach the method of claim 41 discussed above. Kraft also teaches: wherein "the search command format includes the network address of a search engine program for executing the search query" at Col. 10 lines 20-30.

As per claim 45, Cohen and Kraft teach the method of claim 41 discussed above. Kraft also teaches: "periodically validating the search command formats maintained in the adapter table" at Col. 10 lines 10-25.

As per claim 46, Cohen and Kraft teach the method of claim 41 discussed above. Kraft also teaches: "automatically identifying a search command format of a new search engine and update the adapter table" at Col. 6 lines 6-45.

As per claim 47, Cohen and Kraft teach the method of claim 41 discussed above. Kraft also teaches: "collecting search information identifying a search box page of a search engine and identifying the search command format from the search information" at Col. 6 lines 6-30.

As per claim 48, Cohen and Kraft teach the method of claim 47 discussed above. Kraft also teaches: "the step of collecting search information includes collecting the HTML code of the search box and parsing the HTML code to identify the search command format" at Col. 6 lines 6-30.

As per claim 49, Cohen and Kraft teach the method of claim 45 discussed above. Kraft also teaches: wherein "the step of detecting submission of a search query to at least one search engine includes detecting submission of a completed form object" at Col. 6 lines 6-30.

As per claim 50, Cohen and Kraft teaches the method of claim 1 discussed above. Cohen also teaches: "wherein storing a search trail ends in the event that the client accesses a new page from a page corresponding to a search trail without following a hyperlink between a page" at Figs. 5-6.

As per claim 51, Cohen and Kraft teaches the method of claim 48 discussed above. Cohen also teaches: "wherein the client accessing a new page from a page corresponding to a search trail without following a hyperlink between the page, includes: accessing the new page without causing a referrer to be sent to the server" at Figs. 5-6.

As per claim 52, Cohen and Kraft teaches the method of claim 49 discussed above. Cohen also teaches: "wherein accessing a new page without causing a referrer to be sent to the server includes any one or more of: typing a URL of the new page into a browser; pressing a home button of a browser" at Figs. 5-6.

As per claim 5, Cohen and Kraft teach the method of claim 49 discussed above. Kraft also teaches: wherein "the step of detecting submission of a completed form object performed at the client and includes: locating form objects in a object model of content served to a client; and adding a routine to each form object to enable interception of the completed form object upon submission" at Col. 6 lines 6-30.

As per claim 6, Cohen and Kraft teach the method of claim 5 discussed above. Kraft also teaches: wherein "the step of locating all form objects in a document object model of content served to a client is carried out after the content has been served to the client" at Col. 6 lines 6-30.

As per claim 7, Cohen and Kraft teach the method of claim 6 discussed above. Kraft also teaches: wherein "the content is an HTML document, and all form objects in a document object model of the HTML document are located once a DocumentComplete event occurs" at Col. 6 lines 6-30.

As per claim 8, Cohen and Kraft teach the method of claim 7 discussed above.

Kraft also teaches: wherein “the HTML document includes a GET or a POST form” at Col. 6 lines 6-30.

Response to Arguments

5. Applicant's arguments filed 4/4/2012 have been fully considered but they are not persuasive. The examiner respectfully traverses Applicant's arguments.

Regarding claims 1, 9-17, 24-25, 27-35, Applicant argued that Cohen does not teach the step of “searching the data storage system to match the received second query to the first search query corresponding to at least one search trail” as recited in claim 1. On the contrary, Cohen teaches at Col. 8 lines 15-50 the step of locating and returning previous search trails in response to subsequent user's search query. Cohen also teaches at Col. 5 lines 55-65 that each search trail is stored with associated search term input by the user. Cohen therefore teaches the step of "searching the data storage system to match the received second query to the first search query corresponding to at least one search trail" as claimed.

Applicant concerned that Cohen does not teach how or why the “search terms input by the user” is stored and how it is used to retrieve of data for subsequent users. It is noted that the claim limitation only requires "searching the data storage system to match the received second query to the first search query corresponding to at least one search trail"; Cohen teaches the step of returning the search trail associated with search

term (i.e. "first search query") in response to subsequent query (i.e. "second query") and therefore anticipated the claimed limitation.

Regarding claim 32, Applicant argued that Cohen does not teach "each search trail corresponding to a respective search query". On the contrary, as discussed above, Cohen teaches at Col. 5 lines 55-65 that each search trail is stored with associated search term input by the user.

Regarding claims 5-7, 41 and 49, Applicant argued that Cohen and Kraft, as combined, do not teach "adding a routine to each form object to enable interception of the completed form object upon submission". On the contrary, Kraft teaches at Col. 6 lines 6-30 the step of adding a browser plug-in (i.e. "routine") to determine whether a URL represents a query (i.e. "enable interception of the completed form object upon submission").

Regarding claims 6-7, Applicant argued that "the Kraft system is implemented as a Proxy. This proxy does not interact directly with the browser document object model in response to the user actions". On the contrary, Kraft teaches the proxy is a "web browser plug-in", which interact with the browser document object model to determine whether a URL represents a query.

Regarding claims 28, 29 and 53, Applicant argued that neither Kraft nor Cohen teaches a process for reinforcing the link between a search keyword and a URL, by increasing trail weight in response to a number of time a step on the trail is visited. On the contrary, Cohen teaches at Col. 11 lines 15-65 the step of monitoring user's access to each document and giving some weight to user actions.

In light of the foregoing arguments, the 35 U.S.C 102 and 103 rejections are hereby sustained.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH PHAM whose telephone number is (571)272-

4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh B. Pham/
Primary Examiner
Art Unit 2166

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